university staffing and workloads, Montana

Office of the Legislative Auditor

State of Montana



Report to the Legislature

December 1990

STATE DOCUMENTS COLLECTION

FEB 28 1991

MONTANA STATE LIBRARY 1515 E. 6th AVE. HELENA, MONTANA 59620

# **Survey of University Staffing and Workloads**

**Montana University System** 

At the request of the Legislative Audit Committee, we gathered information on faculty staffing levels and their workloads at the university units.

# PLEASE RETURN

Direct comments/inquiries to: Office of the Legislative Auditor Room 135, State Capitol Helena, Montana 59620





#### PERFORMANCE AUDITS

Performance audits conducted by the Office of the Legislative Auditor are designed to assess state government operations. From the audit work, a determination is made as to whether agencies and programs are accomplishing their purposes, and whether they can do so with greater efficiency and economy. In performing the audit work, the audit staff uses audit standards set forth by the United States General Accounting Office.

Members of the performance audit staff hold degrees in disciplines appropriate to the audit process. Areas of expertise include business and public administration, statistics, economics, computer science, communications, and engineering.

Performance audits are performed at the request of the Legislative Audit Committee which is a bicameral and bipartisan standing committee of the Montana Legislature. The committee consists of four members of the Senate and four members of the House of Representatives.

### MEMBERS OF THE LEGISLATIVE AUDIT COMMITTEE

Senator Greg Jergeson, Vice Chairman Senator Tom Keating

Senator Tom Rasmussen Senator Paul Syrcek Representative Mike Kadas Representative Bruce Simon

Representative Robert Pavlovich

Representative John Cobb, Chairman

#### STATE OF MONTANA



# Office of the Legislative Auditor

STATE CAPITOL HELENA, MONTANA 59620 406/444-3122

**DEPUTY LEGISLATIVE AUDITORS:** 

MARY BRYSON
Operations and EDP Audit
JAMES GILLETT
Financial-Compliance Audit

JIM PELLEGRINI Performance Audit

December 1990

The Legislative Audit Committee of the Montana State Legislature:

We conducted a survey of university staffing levels and the workload of faculty and professional staff. This report outlines the data we compiled in these two areas for the six university units within the Montana University System.

We wish to express our appreciation to staff at each of the university units and the Commissioner of Higher Education for their cooperation and assistance.

Respectfully submitted

Scott A. Seacat Legislative Auditor



## Office of the Legislative Auditor

# **Survey of University Staffing and Workloads**

Montana University System

Members of the audit staff involved in this audit were: Lisa Blanford, Angie Grove, Jim Nelson, and Joe Murray.



## **Table of Contents**

|                           | List of Tables and Figures   | iii      |
|---------------------------|--|----------|
|                           | Appointed and Administrative Officials   | ٧        |
| Chapter I<br>Introduction | Survey Objectives  | 1        |
|                           | Survey Scope and Methodology   | 1        |
|                           | Other Committees Reviewing the University System   | 2        |
|                           | Report Organization  | 2        |
|                           | Personnel Policies and Accreditation Affect Staffing  Defining Full-Time and Part-Time Faculty | 3        |
|                           | Post-Retirement Rank   | 4        |
|                           | Accreditation Standards  | 4        |
|                           | Other Assignments  | 6        |
|                           | Summary  | 7        |
| Chapter II<br>Background  | Introduction   | 9        |
|                           | University System Organization   | 9        |
|                           |  | 10       |
|                           | Montana College of Mineral Science and Technology  | 11       |
|                           |  | 11<br>11 |
|                           |  | 12       |
|                           |  | 12       |
|                           | University and College Organization  | 12       |
|                           | School Enrollment  | 14       |
| Chapter III<br>Staff Size | Introduction   | 17       |
|                           | Staff Classification   | 17       |
|                           |  | 17       |
|                           |  | 18<br>18 |
|                           | Classificu   | 10       |
|                           | Staffing Levels  | 18       |
|                           | Summary  | 20       |
|                           | ·  | 20       |

### **Table of Contents**

|                                   | Professional Staff   |                      |
|-----------------------------------|--|----------------------|
| Chapter IV<br>University Workload | Introduction   | 23                   |
| omitology workload                | How We Defined Workload  | 23                   |
|                                   | Compiling Workload Data  Questionnaire Format  Who Received the Questionnaire  Questionnaire Follow-up | 25<br>25<br>26<br>28 |
|                                   | Information From the Workload Questionnaires   | 29                   |
|                                   | Average Weekly Hours   | 29<br>31             |
|                                   | Workload Categories  | 34<br>36             |
|                                   | Week   | 39                   |
|                                   | Instructional Areas  | 39<br>40             |
|                                   | Duties Included in Other Activities  | 44                   |
|                                   | Individual Faculty Members   | 44<br>47             |
| Chapter V<br>Workload Management  | Introduction   | 51                   |
|                                   | Workload Guidelines  | 51                   |
|                                   | Assigning Workload   | 52                   |
|                                   | Monitoring Workload  | 53                   |
|                                   | Summary  | 54                   |
| Agency Response                   | Montana University System  | 57                   |
| Appendix A                        | Sample Questionnaire Form & Instructions   | <b>1</b> -1          |

## List of Tables and Figures

| Table 1  | Montana University System   |    |
|----------|---|----|
|          | Fall Term Head Count and Full-Time Enrollment Academic Years 1988-89 and 1989-90                                | 14 |
| Table 2  | Montana University System Staffing - (unaudited) Fiscal Year 1989-90  | 19 |
| Table 3  | Head Count of Montana University System Staff September 1989 through March 1990                                 | 20 |
| Table 4  | Montana University System  Departments We Surveyed at Each School  Academic Year 1989-90                        | 27 |
| Table 5  | Montana University System Number of Questionnaires Sent and Number of Respondents Academic Year 1989-90         | 28 |
| Table 6  | Montana University System Average Weekly Hours Reported Per Faculty Member at Each Department Fall Term 1989-90 | 30 |
| Table 7  | Montana University System Student/Faculty Ratios 1989 and 1991 Bienniums  | 40 |
|          |   |    |
| Figure 1 | Montana University System Organization  | 10 |
| Figure 2 | University and College Reporting Structure  | 13 |
| Figure 3 | Montana University System Average Faculty Hours Per Week Per School Fall Term 1989-90                           | 33 |
| Figure 4 | Montana University System Percent of Time Spent In Each Workload Category Each Week Fall Term 1989-90           | 35 |
| Figure 5 | Montana University System Average Weekly Hours Reported By Each School  | 26 |
|          | Fall Term 1989-90   | 36 |

# List of Tables and Figures

| Figure 6   | Montana University System                            |    |
|------------|--|----|
|            | How Instruction Time is Spent                        |    |
|            | Academic Year 1989-90                                | 38 |
| Figure 7   | Time In Research for a Sample of Departments         |    |
| 1.10 E. X. | MSU, U of M, EMC - Fall Term 1989-90                 | 42 |
| Figure 8   | Time In Research for a Sample of Departments         |    |
|            | Tech, WMC, NMC - Fall Term 1989-90                   | 43 |
| Figure 9   | Montana University System                            |    |
|            | Faculty Workload Areas In Specialized Departments    |    |
|            | Fall Term 1989-90                                    | 45 |
| Figure 10  | Montana University System                            |    |
|            | Overall Percent of Time Spent in Workload Activities |    |
|            | Fall Term 1989-90                                    | 48 |

# Appointed and Administrative Officials

| Board of Regents of   |   |            | <b>Expires</b> |
|-----------------------|---|------------|----------------|
| Higher Education      |   |            |                |
| mgner Education       | a. a                                      |            | 1000           |
|                       | Stan Stephens, Governor*                  |            | 1992           |
|                       |   |            |                |
|                       | Nancy Keenan, Superintendent              |            |                |
|                       | of Public Instruction*                    | =.         | 1992           |
|                       | or radic instruction                      |            | 1772           |
|                       |   |            | 1004           |
|                       | William Mathers, Chairman                 | Miles City | 1994           |
|                       |   |            |                |
|                       | Elsie Redlin, Vice Chairman               | Lambert    | 1991           |
|                       | · · ·                                     |            |                |
|                       | Jim Kaze                                  | Havre      | 1992           |
|                       |   | Billings   | 1993           |
|                       | Tom Topel                                 |            |                |
|                       | Cordell Johnson                           | Helena     | 1996           |
|                       | Kermit R. Schwanke                        | Missoula   | 1997           |
|                       |   |            |                |
|                       | Brad Musgrove, Student Regent             | Bozeman    | 1991           |
|                       | Diau Musgiove, Student Regent             | Dozeman    | 1771           |
|                       | <b>+- aa: .</b>                           |            |                |
|                       | *Ex officio members                       |            |                |
|                       |   |            |                |
|                       |   |            |                |
| Commissioner of       | John Hutchinson, Commissioner             |            |                |
| Higher Education      | John Hatenmoon, Commissioner              |            |                |
| righer Education      |   |            |                |
|                       |   |            |                |
| University of Montana | George Dennison, President                |            |                |
|                       |   |            |                |
| Montana State         | William Tietz, President                  |            |                |
| University            | 77 21 21 21 21 21 21 21 21 21 21 21 21 21 |            |                |
| Omversity             |   |            |                |
| 77 . 75 .             |   |            |                |
| Eastern Montana       | Bruce Carpenter, President                |            |                |
| College               |   |            |                |
| •                     |   |            |                |
| Montana College of    | Lindsay Norman, President                 |            |                |
| Mineral & Science     | Linusay Norman, Trestuent                 |            |                |
|                       |   |            |                |
| Technology            |   |            |                |
|                       |   |            |                |
| Western Montana       | W. Michael Easton, Provost                |            |                |
| College               | ,   |            |                |
| 2011080               |   |            |                |
| Nashan Mastana        | Will B III B II                           |            |                |
| Northern Montana      | William Daehling, President               |            |                |
| College               |   |            |                |
|                       |   |            |                |



# Chapter I Introduction

### Survey Objectives

At the request of legislators and approval by the Legislative Audit Committee, we conducted a survey of university staffing and workload patterns of faculty and professional staff.

Specific objectives of the survey were to:

- 1. Determine the different types and numbers of staff at each university unit.
- 2. Define the various duties that comprise university faculty and professional staff workload.
- 3. Determine what workload policies and procedures the university system has in place.
- 4. Compile university faculty and professional staff workload data.
- Compare workload data to each university unit's mission statements and information reported in other faculty workload studies.
- 6. Determine how workload is assigned and monitored by university management.

### Survey Scope and Methodology

Our survey was of limited scope. The primary goal of our survey was to provide information to the legislature. A thorough examination of management controls and compliance areas was not conducted. To meet our survey goal we focused our review on six university units. We did not review or compile data from vocational-technical schools or community colleges. We did not include duties or workload performed by university staff on projects outside the university system, i.e., private consulting. We did not evaluate the quality or usefulness of work being performed or the expertise of staff performing the work. We did not evaluate the adequacy of staffing levels or salaries of university personnel.

To determine the number of staff at the six units we reviewed payroll records, Board of Regent contracts, and personnel information from the Department of Administration. We interviewed staff at all units. We compiled background data on number and

### Chapter I Introduction

type of personnel. Questionnaires were sent to administrative, professional, and faculty employees at all six university system units. Personnel information, policies and procedures, and staff interviews were used to supplement questionnaire results. A sample of questionnaires was reviewed by a number of deans/department chairs to confirm the data. In addition, we reviewed course listings to determine courses taught. We examined reports and workload criteria from other states and national organizations. We reviewed accreditation standards and accreditation review procedures.

The survey was conducted in accordance with applicable governmental auditing standards.

### Other Committees Reviewing the University System

At the time of our review there were several other committees and commissions studying various aspects of the university system. These include: Education Commission for the Nineties and Beyond, Committee on State Employee Compensation, and Post Secondary Education Committee. Each group is evaluating different areas relating to the university system. The Education Commission for the Nineties and Beyond is responsible for assessing all aspects of post-secondary and higher education. It is studying general issues that are current concerns in higher education. The Committee on State Employee Compensation is reviewing the compensation levels of all state employees including those within the university system. The Post Secondary Education Committee is reviewing the funding formula and issues which affect university budgets. We communicated our survey objectives, attended meetings, and received information on activities of these committees to minimize any duplication of efforts.

### Report Organization

This report is presented in five chapters. The following outlines the information provided in each chapter.

Chapter I - goals and objectives of our survey

Chapter II - background information on university system and unit organization and school enrollment

Chapter III - data on the types and number of personnel at each university unit

Chapter IV - workload areas and questionnaire results

Chapter V - methods used to assign and monitor workload

In addition, we include an appendix at the end of this report which contains documents used to gather workload data from university system staff.

### Personnel Policies and Accreditation Affect Staffing

In surveying university staffing we found personnel policies and accreditation affect staffing. These issues should be kept in mind while reviewing staffing and workload data from the various schools. The issues are discussed in the following sections.

# Defining Full-Time and Part-Time Faculty

The various units have different criteria for defining part-time and full-time faculty appointments. Three of the units; Eastern Montana College, Northern Montana College, and Western Montana College, use number of credits taught to make this determination. The other three units define part-time faculty as those employed on temporary contract or letter of appointment basis. In addition, there is no overall university system policy governing use of contracts or University Letters of Appointment for faculty. As a result, there are inconsistencies between university units regarding their use. Generally, contracts are used for continuing full-time faculty and Letters of Appointment are used for part-time or nontenure track faculty. However, use can vary among the campuses. At Northern Montana College, some part-time faculty have contracts and some do not. This is also true at the Montana College of Mineral and Science Technology and Western Montana College.

### Chapter I Introduction

#### Post-Retirement Rank

There are also faculty who have post-retirement rank. This is a change in employment status that is prescribed in Board of Regents' policy. The policy was developed to allow experienced faculty members to continue their professional relationship with the school even though they have chosen partial retirement status. Post-retirees usually teach three courses per year. They can teach all three courses in one term which results in full-time academic duties for that period or they can teach one course a term throughout the year. Post-retirees working in this manner would appear as a part-time faculty member for each term throughout the year. They may also perform duties other than teaching. Using post-retirees affects the staffing and workload levels because other part-time faculty members may need to be hired thereby increasing the number of individuals employed.

### **Position Categories**

Criteria for assigning staff as classified, administrative, or professional does not exist. A classified position at one unit may be a nonclassified professional position at another unit. Library staff, department chairs, and research staff are also categorized in varying ways. Research staff are professional staff at Montana State University and are categorized as faculty at the University of Montana. In addition, coaches are categorized as administrative staff at some university units and as faculty at others. The Commissioner of Higher Education is currently developing a draft policy to provide criteria for the all the university units.

#### Accreditation Standards

There are several accreditation associations with which the universities and colleges in Montana are affiliated. The schools are accredited to ensure consistent academic guidelines are in place. Also, in some instances, students cannot qualify to take professional licensing exams without graduating from an accredited program.

The accrediting association varies depending on the type of programs offered at each school. Some associations are

exclusive such as the Accreditation Board for Engineering and Technology (ABET) which accredits engineering programs and applies to programs at Montana State University and Montana College of Mineral Science and Technology. Other associations are more general in approach. The regional accreditation board for Montana is the Northwest Associations of Schools and Colleges which accredits all educational programs offered at the schools.

The associations are concerned with preventing overloading of university staff rather than setting minimum workloads. To monitor staffing they perform periodic reviews at the universities. These reviews include an examination of curriculum, expenditures, course content, number of faculty, and faculty instructional workloads. University information is compared to accreditation standards in each of these areas. Some of these standards affect the allowed workloads and number of faculty in the programs offered. For example, ABET requires a minimum of three full-time faculty in any program which offers advanced engineering degrees. The Northwest Association also recommends a core of full-time instructional faculty in each program. To maintain accreditation in the programs reviewed, the associations also recommend faculty teach no more than nine credits per quarter/semester for graduate level courses and no more than 12 credits if teaching undergraduate courses.

These requirements eliminate some of the flexibility of work-load management. If the university offers an accredited program which has low student enrollment, they still have to maintain the required full-time faculty. Accreditation requires the faculty to devote their full time to one program. Without accreditation standards universities could, for example, have engineering faculty teach in the mathematics department if the two departments' workload needed adjusting.

### Chapter I Introduction

### Other Assignments

We noted instances where faculty instructional workloads had been reduced to accommodate assigned special projects. For instance, the conversion of all schools to semesters has required a major effort on the part of faculty and management. At the larger units, staff workload in other areas was adjusted to address the conversion effort.

Workloads are also affected when faculty are assigned graduate research or teaching assistants. Assistants can aid faculty with grading of papers and tests, supervising labs, and teaching lower level courses. A faculty member can be responsible for a lower level course but this course may consist of several separate sections of students. These sections can be taught by graduate teaching assistants. The assigned faculty member is responsible for supervising the assistant and ensuring the quality of the course is maintained. The number of assistants reporting to faculty members can affect their workloads by increasing their advising time and/or decreasing their instructional time.

Committee assignments are another duty which affects workloads. For example, search committees have to spend time reviewing and screening applicants for vacant positions. Some committees require more time than others.

### Staffing Changes

Workloads can fluctuate between each quarter or semester.

Approval of a grant proposal can affect several faculty
members. Staff involved in grant work may be released from
their instructional duties while other staff may have to increase
their instructional credit load to cover required courses.

Sabbatical assignments can affect staff workloads within an applicable department. The number of courses taught may increase for the remaining faculty to ensure required courses are offered during a faculty member's sabbatical absence. However, we found the number of sabbatical assignments were limited.

Some faculty who are full-time research staff or hold an administrative position may "volunteer" to teach a course or two. They also may be paid to teach one or more courses in addition to their research duties. This allows the department to offer more courses or provide replacements for staff on leave. This also allows other staff to reduce their instructional duties and perform activities in other areas.

### Summary

When reviewing the data provided in this report, the variation between units and departments within units is evident. Some of the variation can be explained by:

- -- The definitions of full-time and part-time faculty are not consistent.
- -- Overall criteria for assigning staff as classified, administrative, or professional does not exist.
- -- Accreditation standards affect staffing assignments.
- -- Instructional workload can be adjusted to meet other priorities, grants, committees, etc.



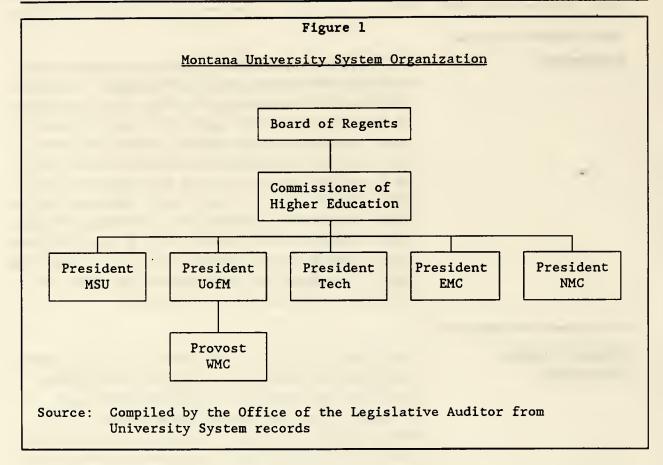
# Chapter II Background

### Introduction

The two universities and four colleges of the Montana University System serve approximately 28,000 students. The system includes universities, specialty institutions and regional colleges. The university system places emphasis in three staff activity areas: instruction, research, and public service. The Montana University System includes Montana State University (MSU), the University of Montana (U of M), Eastern Montana College (EMC), Northern Montana College (NMC), Montana College of Mineral Science and Technology (Tech), and Western Montana College (WMC). WMC was merged with U of M in 1988. However, we compiled data on WMC separately for this report. The following sections describe the structure of this system, and include data on student enrollment at each unit.

# University System Organization

The Montana University System is administered by the Board of Regents and the Commissioner of Higher Education (CHE). The Board is responsible for governance of the Montana University System. The Commissioner is appointed by the Board of Regents and is the chief administrative officer for the university system. Each unit is administered by a president or provost. The following illustration displays the basic organization of the Montana University System.



Each unit has a separate role within the system. The following sections outline their role and scope.

# Montana State University (MSU)

Montana State University was founded in 1893 and is located in Bozeman. MSU is Montana's only land grant university and is considered a comprehensive state university offering a broad range of baccalaureate and graduate degrees. MSU also administers the Montana Agricultural Experiment Station and the Montana Extension Service. MSU offers degrees at associate, baccalaureate, master, and doctoral levels. MSU is the only school in Montana with programs in the areas of agriculture, architecture, home economics, and film. Other programs offered include nursing, non-mining engineering, adult higher

eduction, and technology education. Major research areas at MSU include agriculture, engineering, and the biomedical and physical sciences.

# University of Montana (U of M)

The University of Montana was also founded in 1893 and is located in Missoula. U of M is considered a comprehensive, doctoral level university. The school has exclusive responsibility within the Montana University System for instructional programs in journalism, law, forestry, and pharmacy. It is also the only school which currently offers graduate degrees in accounting, business administration, and administrative sciences. U of M awards degrees at the associate, baccalaureate, master, and doctoral levels.

### Montana College of Mineral Science and Technology (Tech)

Montana College of Mineral Science and Technology was founded in 1893 and is located in Butte. Tech has devoted its programs to graduate and undergraduate degrees in the areas of minerals, energy, safety and environment. Tech offers degrees at the associate, bachelor and master degree levels. Curricula at this school has become more specialized in technology related to mining and materials processing industries. Tech has established bachelor and master degrees in engineering science. Degrees have also been established in areas such as minerals processing, petroleum engineering, environmental engineering, and geological engineering.

# Western Montana College (WMC)

Western Montana College was established in 1893 and is located in Dillon. In July of 1988 WMC was merged administratively with U of M and functions as a separately accredited, independently budgeted branch campus of U of M. WMC's primary focus is teacher education with special emphasis placed on education of teachers for service to Montana's smaller schools in rural areas. WMC offers baccalaureate degrees in elementary and secondary education. WMC also has associate degree programs in the arts, sciences, and business and participates in a master degree program in education offered by U of M.

# Eastern Montana College (EMC)

Eastern Montana College was established in 1927 and is located in Billings. EMC's primary curricular emphasis is in the areas of undergraduate and graduate teacher education. EMC also offers programs in liberal arts, business, and economics. EMC is also the only school in Montana offering programs in special education, special education supervision, and rehabilitation and rehabilitation counseling. EMC offers special and pre-professional programs and awards degrees at the associate, baccalaureate, and master levels.

# Northern Montana College (NMC)

Northern Montana College was established in 1929 and is located in Havre. NMC's curricula emphasizes traditional vocational education and industrial technology. Traditional vocational education programs concentrate on skills and craftsmanship in selected areas. Industrial technology programs concentrate on the operations, management, and servicing of technologically complex systems such as computer electronics. Northern Montana College offers a range of baccalaureate programs that include liberal arts and sciences, business, nursing and teacher education. NMC offers programs at the associate and baccalaureate level, and masters degrees in education.

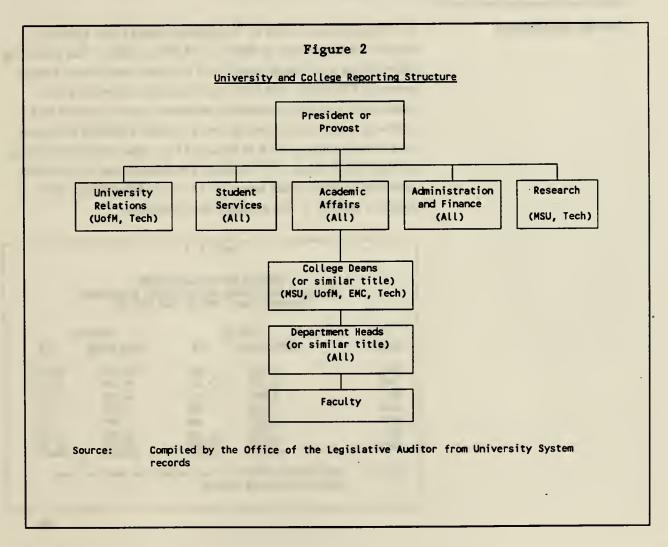
# University and College Organization

Operations at each university and college are generally divided into university relations, student services, administration and finance, academic affairs (includes instruction), and research. Each of these areas is managed by a vice president or director.

MSU, U of M, EMC, and Tech use a two-tiered management system for academic affairs. College deans (or similar title) are responsible for administering the operations of a particular college (or division) containing a number of academic programs. Within each college (or division) department heads (or similar title) are responsible for administering the operations of academic programs. For example, the College of Arts and Sciences at U of M is administered by a college dean while the

History Department within that college is administered by an assigned department chairperson. NMC and WMC use a single-tiered management system. At these schools the department directors report directly to the head of academic affairs.

Duties of the deans and department heads include budget responsibilities for the college and department, review and approval of class schedules, assignment of teaching loads, and evaluation of faculty. The following illustration depicts university and college reporting structure.



There are several committees and boards that participate in administrative functions conducted at the six university system units. Committee or board membership often includes administrative, professional, and faculty representatives. Examples of committees and boards include: Long Range Planning Committee, Promotion and Tenure Committee, Admissions and Graduation Requirements Board, and Research Committee. Multiple committees are intended to facilitate group decision making and allow for employee participation in administrative matters.

### School Enrollment

Enrollment at each unit in the system ranges from approximately 1,000 students at WMC to 10,000 at MSU. The following chart shows total "head count" and full-time equivalent enrollments (FTE) during the Fall term for each unit within the Montana University System for academic years 1988-89 and 1989-90. Head count depicts every student enrolled including part-time students. FTE is adjusted full-time enrollment using student credit loads. FTE figures are determined by dividing total fall student credit hours by 15 for undergraduate level students and by 12 for graduate level students.

|         | T                     | able 1       |                 |        |
|---------|-----------------------|--------------|-----------------|--------|
|         | Montana U             | niversity Sy | ystem           |        |
|         | Fall Term Head Coun   | t and Full-1 | Time Enrollment |        |
|         | Academic Years        | 1988-89 an   | d 1989-90       |        |
|         |                       |              |                 |        |
|         | 1988-                 | 89           | 1989-90         | )      |
| School  | Head Count            | FTE          | Head Count      | FTE    |
|         |                       |              |                 |        |
| MSU     | 10,024                | 9,289        | 10,251          | 9,572  |
| UofM    | 8,879                 | 7,805        | 9,679           | 8,539  |
| EMC     | 3,994                 | 3,125        | 4,055           | 3,163  |
| Tech    | 1,818                 | 1,505        | 1,772           | 1,452  |
| WMC     | 1,097                 | 888          | 991             | 827    |
| HMC     | _1,593                | 1,313        | 1,758           | _1,395 |
| Totals  | 27,405                | 23,925       | 28,506          | 24,948 |
|         |                       |              | <del></del>     |        |
| Source: | Compiled by Office of | of the Legis | lative Auditor  | from   |
|         | University System re  | cords        |                 |        |

### Chapter II Background

Seventy percent of the university system's students are enrolled at the two universities. The remaining 30 percent are enrolled at the four state colleges. Fall term enrollment data was used to be consistent with staff workload data and to be consistent with data used during the budget process.



#### Introduction

This chapter provides information detailing types and numbers of staff employed by each of the six university units for the 1989-90 academic year.

#### Staff Classification

Montana University System staff are distributed into three major areas: faculty, professional, and classified personnel. These staff are responsible for performing all functions necessary in operating the six university system units.

### **Faculty**

Faculty are generally employees who perform duties in an academic related function. Appointments to faculty positions are identified as either tenurable or nontenurable. Tenure track appointments are made at the ranks of: 1) Instructor, 2) Assistant Professor, 3) Associate Professor, and 4) Professor. The proportion of tenure track faculty varies widely between the six units. It ranges from 55 to 75 percent of total faculty employed.

The Montana University System Policy and Procedures Manual states tenure is the right to continue from appointment term to appointment term. Tenure continues until either the faculty member resigns, retires, is discharged for cause; or, the faculty member is terminated for financial reasons or program reduction, curtailment or discontinuance. Specific requirements for tenure are contained in collective bargaining agreements and university policy manuals.

University units utilize nontenure track faculty primarily for instructional purposes. These personnel are not usually responsible for other faculty duties which may include research, administration, student activities, committee participation, and public service. Nontenure appointments are for a specified term and expire at the end of the term unless staff are rehired.

### Chapter III Staff Size

### Professional

Professional staff generally do not hold academic positions and are nontenure track employees. They usually have a Board of Regents contract or a University Letter of Appointment. Board of Regents contracts are approved by the Board and are generally issued for permanent positions. Letters of Appointment are approved by the university president and are generally issued for temporary positions. Professional staff can include part-time persons or staff on split appointments. Split appointments are staff who have responsibilities in two or more program areas. These responsibilities may include academic duties. Professionals can serve in administrative positions such as the Vice President of Academic Affairs, College Dean, Department Director, Registrar, and Personnel Officer.

#### Classified

Classified employees are nonacademic employees who do not receive Board of Regents contracts and are classified according to the Statewide Classification and Pay Plan System. These employees receive hourly wage compensation. Examples of classified employees include: Custodial Worker, Office Clerk, Computer Operator Technician, and Clinic Aide.

### Staffing Levels

There are a number of reports available to the Legislature which contain data regarding number of staff employed at the six university units. These sources include Legislative Fiscal Analyst (LFA) budget reports, Office of Budget and Program Planning (OBPP) budget reports, and CHE's Montana University System Operations Plan. Variations in the reported number of university staff are common among these information sources. The reported staffing levels vary for several reasons. When a university unit establishes a new position, or reclassifies or deletes an existing position, there can be a delay in updating this information on the other central data sources. In addition, vacant positions cause discrepancies in reported staffing levels. Other differences occur because some reports compile staffing levels by actual number of staff while others use full-time equivalents (FTE). Different funding sources also affect reported staffing

levels. For example, "all funds" includes current unrestricted funds and auxiliary funds. Staff numbers in this funding category are therefore higher. The following table illustrates variations in university system staffing levels as reported by other sources. There is no break out by type of employee. The data includes faculty, professional, and classified employees.

Table 2

Montana University System Staffing - (unaudited)
Fiscal Year 1989-90

| School                                   | LFA<br>Budgeted FTE<br>Unrestricted<br>Funds           | OBPP Budgeted FTE Unrestricted Funds                   | CHE Estimated FTE Unrestricted Funds            | CHE<br>Estimated<br>FTE<br>All Funds     |
|--|--|--|---|--|
| MSU<br>UofM<br>EMC<br>Tech<br>WMC<br>NMC | 1429<br>863<br>348<br>201<br>115<br><u>192</u><br>3148 | 1297<br>772<br>313<br>209<br>102<br><u>184</u><br>2877 | 1463<br>978<br>345<br>212<br>128<br>199<br>3325 | 2198<br>1540<br>444<br>302<br>186<br>259 |

Source: Compiled by the Office of the Legislative Auditor from Commissioner of Higher Education, Office of the Legislative Fiscal Analyst, and the Office of Budget and Program Planning records

During the survey we gathered staffing level data independently due to variances in the staff numbers expressed in other reports. We determined the number of faculty, professional, and classified staff based on payroll listings supplied by the university units. The payroll data was compared to Board of Regents contracts, registrar's listings, university course listings, and leave records to ensure the completeness of the information. Payroll data reflects a head count of staff paid from university payrolls during the first three quarters (or two semesters) of fiscal year 1989-90. It includes both full and part-time staff. Data was not compiled by FTE. The following table illustrates a head count of staff employed at any time from September 1989 through March 1990 at the six units of the Montana University System.

#### Table 3

## Head Count of Montana University System Staff September 1989 through March 1990

| School | Faculty    | Professional | Fac/Prof* | Classified | Total |
|--------|------------|--------------|-----------|------------|-------|
| MSU    | 784        | 443          | 0         | 1062       | 2289  |
| UofM   | 555        | 63           | 85        | 795        | 1498  |
| EMC    | 232        | 38           | 0         | 226        | 496   |
| Tech   | 74         | 40           | 35        | 98         | 247   |
| LMC    | 63         | 26           | 10        | 65         | 164   |
| NMC    | <u>161</u> | _23          | _2        | <u>98</u>  | 284   |
| Totals | 1869       | 633          | 132       | 2344       | 4978  |

\*Fac/Prof staff have both administrative title and faculty rank such as Department Chair/Professor. The majority of these staff are considered professional staff members and may have some instructional responsibilities.

Source:

Compiled by the Office of the Legislative Auditor from University System records

### Summary

There are numerous variables which effect staffing levels at the six units of the Montana University System. Each of these variables contribute to differences in numbers of staff employed at each unit. The following section of the report discusses some of the differences in staffing levels at the various units.

### Faculty

Approximately 72 percent of Montana University System faculty are employed by the two universities. The number of faculty at each unit is most affected by the number of students enrolled at each school. There are several other factors which effect faculty staffing numbers. These include accreditation standards, types and levels of academic programs, use of part-time staff, visiting instructors, and post retirement faculty. Since our staffing data reflects a head count, units with greater use of part-time, visiting, and post retirement faculty, will experience higher head counts. Because of the difference in the way units

define part-time staff we could not separate these staff members out.

#### Professional Staff

When compared to other units, the number of categorized professional staff appears higher at MSU for several reasons. MSU has professional staff in positions that other university units do not have or have in limited amounts. Additional types of personnel at MSU include 312 staff assigned to: Research, County Extension Service, Agricultural Experiment Station, Survey Research Center, Museum of the Rockies, Library, and tutors. In addition, there are also other research staff such as specialists, biologists, managers, program leaders, project directors, and post doctoral fellowships included in professional staff. In comparison, U of M has 30 research staff and they are categorized as faculty rather than professional staff. U of M also has professional staff which the colleges do not have or have in lesser amounts. Examples include staff in the areas of alumni relations, environmental health, and graduate studies.

#### Classified

There are several factors which contribute to the differences in the number of classified employees at the six university system units. These include campus size, student enrollment, use of private contractors, student employees, and the number of satellite campuses. For example, EMC and Tech have greater populations of students living off campus. This reduces the amount of classified personnel needed to maintain facilities. U of M uses private contractors to provide custodial services, while MSU does not use contracted custodial services to the same extent.



# Chapter IV University Workload

#### Introduction

Our survey objective was to define the different activities that comprise workload. There are several different types of workload activities for personnel at the universities. Activities vary depending on the type of staff. Workload for administrative and classified personnel is defined in their job descriptions and varies widely with each job type. We concentrated our review on the different aspects of faculty workload.

The following chapter outlines the major duties of faculty. The charts summarize data compiled from a workload questionnaire that was sent to a sample of university personnel. University staff provided information regarding workload. We conducted interviews and reviewed documentation to improve the accuracy of information gathered on the questionnaires.

### How We Defined Workload

In order to evaluate faculty workload, we first had to define workload. Measures of <u>instructional</u> workload are common, but faculty workload is more than instruction. In fact, our work indicates about 64 percent of faculty time is spent conducting activities which are not directly related to instructional workload.

Instructional load is only a part of a faculty members duties. Additional activities include: student advising, public service, committee participation, course development, assigned administrative duties, student activities, and professional development. We also noted instructional duties can be separated into several categories. Based on our work we formulated the following definitions for faculty workload activity categories:

- 1. <u>Instruction</u>-scheduled teaching, class preparation, unscheduled teaching, graduate and thesis assistance, grading.
- 2. <u>Course Development</u>-development of courses/curriculum for future offerings.

- Research specific projects of research, scholarship, and creative activity. Includes time for securing, conducting and administering grants, reviewing colleague's research work, writing books and articles, creating new art forms, public performing, and exhibiting works.
- 4. Advising academic program advising and personal counseling.
- 5. Student Activities general contact with students which is not considered part of instruction or advising. Includes sponsoring student organizations, coaching intercollegiate or intramural athletics, and career placement activities.
- Assigned Administrative Duties only those duties which
  are specifically assigned as administrative duties. Performing duties of dean, chairperson, vice president, etc. This
  also includes recruiting students, interviewing academic
  candidates, administering department units, and keeping
  records.
- 7. Committee Participation time spent on officially designated institutional committees. Graduate and thesis committees are reported in the Instruction category. Includes time for departmental staff meetings, faculty senate, search committees, etc.
- 8. Public Service professional activities directed outside the institution and for the benefit of the general public.

  Community training grants, public lectures, and giving professional advise.
- 9. <u>Professional Development</u> activities related to keeping current in professional field. Sabbatical leave, instructional evaluations, scholarly faculty activities, and professional organization duties included.
- 10. Special/Other Duties any university related activities that cannot be included in the other categories listed.

Faculty handbooks, collective bargaining agreements, and interviews with university system staff indicate faculty evaluations are based on performance in all these activities. Faculty are required to perform public service, research, and professional development along with their instructional obligations. In order to provide a complete description of faculty workload for the

legislature, it is necessary to include both instructional and noninstructional activities.

## Compiling Workload Data

We conducted a questionnaire survey of a sample of administrative, professional, and faculty personnel at each university system unit to gather data on the time spent in the different workload areas. Although we concentrated on faculty, some administrative and professional personnel were included to gain more perspective on overall school activities. We developed the questionnaire based on interviews with staff, university officials, and sample questionnaires from other states. The questionnaire was divided into three parts: background data, average weekly hours worked in various workload categories, and further description of instructional duties. We requested workload estimates for the past academic year (1989-90).

#### Questionnaire Format

The first part of the questionnaire was designed for staff to verify their job title, rank, and contract type. This information was obtained from payroll records at each school. We asked personnel to note any changes or inaccuracy in the information.

The next section outlined the ten different types of activities. We asked staff to estimate the total average hours worked per week during each semester or quarter. We then requested the weekly hours be broken down into the individual categories. This information was requested for each term within the past academic year. Staff were asked to exclude private consulting activities.

The third section of the questionnaire requested data regarding the courses taught and the corresponding hours for each. This included noting the number of lecture, lab, and preparation or other hours for each course. (See Appendix A for an example of the questionnaire form and instructions.)

# Who Received the Questionnaire

We surveyed approximately 34 percent of the faculty and professional staff of the university system (889 individuals). We primarily surveyed faculty, but a limited number of professional and administrative personnel were included to provide information on different aspects of workload and to include staff with duties in more than one program. Both part-time and full-time faculty were surveyed. Professional and administrative positions that were sampled included college deans, department chairs, registrars, librarians, and academic vice presidents.

We surveyed the majority of academic departments at the smaller units. However, due to the number of faculty at the larger units, we selected a sample of their academic departments to receive the questionnaire. We selected similar departments and positions at each school to get a representative sample. We surveyed 100 percent of faculty listed on the payroll records for each department we selected. Because part-time faculty were included, we sampled more personnel than actual number of FTE in these departments. We included departments which offer education, english, mathematics, and business programs at each school. We also included unique areas of study from each school, such as Forestry at U of M and Architecture at MSU.

Our goal was to provide information that reflected the overall workload of various types of faculty for each school. We realized there would be some variation in the data due to the different departments selected for review, and different staff responding to the questionnaire. The following information lists the departments surveyed at each school. The first number after each department indicates the number of questionnaires completed and the second number notes the total number of staff surveyed.

#### Table 4

# Montana University System Departments We Surveyed at Each School Academic Year 1989-90

Administration (7/8)\* Animal/Range Science (20/20) Architecture (12/15) Athletics (2/2) **Business** (27/36) Education (18/34) English (22/30) History (11/18) Library (1/1) Mathematics (23/34) Mech. Engineering (12/14) Media & Theatre (11/15) Plant Pathology (8/9) Plant & Soils (26/30) Political Science (8/8) Psychology (6/6)

U of M Administration (8/8) Accounting (12/19) Drama (15/20) English (14/33) Forestry (19/25) History (9/15) Library (1/1) Mathematics (11/33) Psychology (15/16) Research/Other (4/6) Teacher Education (16/22)

Administration (3/4)
Art (14/14)
Athletics (2/2)
Biological Science (5/6)
Business/Econ (12/15)
Education (15/22)
English (17/21)
Habilitative Ser. (2/2)
History (7/7)
Library (1/2)
Mathematics (14/20)
Psychology (5/7)

<u>Tech</u> Administration (7/10) Athletics (7/7) Biological Science (3/3) Chemistry (5/5) Engineering Science (12/12) Environmental Science (2/3) Geological Engineering (9/9) Info. Systems & Business (7/7) Library (2/2) Math & Computer (11/11) Metallurgy (6/6) Mining Engineering (5/5) OSHA (2/2) Petroleum Engineering (4/5) Program Support (3/3)

Society & Technology (15/15)

Administration (4/6) Athletics (5/6) Art (4/4) Biological Science (2/2) Business (5/8) Education (13/15) English (8/8) History (2/3) Humanities (2/2) Industrial Arts (1/1) Library (2/2) Mathematics (6/6) Music (3/3) Physical Education (7/7) Physics (2/2) Tourism & Recreation (1/1)

Administration (4/4)
Athletics (2/4)
Ag & Mech (4/4)
Business (10/11)
Education (19/36)
Humanities (24/25)
Industrial Mech (2/3)
Science & Math (15/21)

\*First number notes the number of questionnaires completed. The second number notes the total number of staff surveyed.

Source: Compiled by the Office of the Legislative Auditor

#### Questionnaire Follow-Up

After the questionnaires were completed, we visited each campus and interviewed 192 personnel (approximately 22 percent) who had been sent questionnaires. These interviews were conducted to improve the accuracy of information gathered on the questionnaires and to clarify any variations recorded. Interviews were held with randomly selected staff who had completed the questionnaire and with personnel who had not returned their questionnaires. We also interviewed staff who had completed the questionnaire, but appeared to have not understood the questionnaire instructions. During the interviews, we attempted to determine if there were any concerns with the form we used or any related questions. We contacted nonrespondents to determine why they had not responded and to determine if their workload varied from those recorded on the returned questionnaires.

Other follow-up methods also were used. We compared courses listed by faculty to courses listed by the registrar. Completed questionnaires were reviewed by some department heads for reasonableness. The following information outlines the number of staff who responded to our questionnaire at each school.

|               | Table 5                           |                     |
|---------------|-----------------------------------|---------------------|
|               | Montana University Syste          |                     |
| <u>Number</u> | of Questionnaires Sent and Number | er of Respondents · |
|               | Academic Year 1989-90             |                     |
|               |                                   |                     |
|               | Number of                         | Number of           |
| School        | Questionnaires Sent               | Staff Responding    |
| MSU           | 280                               | 214 (76%)           |
| U of M        | . 198                             | 124 (63%)           |
| EMC           | 122                               | 97 (80%)            |
| Tech          | 105                               | 100 (95%)           |
| WMC           | 76                                | 67 (88%)            |
| NMC           | <u>108</u>                        | 80 (74%)            |
| TOTALS        | 889                               | <u>682</u> (77%)    |
| Source: C     | ompiled by the Office of the Leg  | islative Auditor    |

Overall, 77 percent of the questionnaires were completed. In addition, we were able to account for approximately 85 percent of the staff surveyed. Some staff were on leaves of absence, some only taught one quarter a year so were unavailable during our survey, and others were no longer employed at the school at the time of our review. For example, at U of M 124 questionnaires were completed, but we were able to account for 166 (84 percent) of the staff we surveyed. Most of the unavailable faculty were not employed at the university during the time of our review.

# Information From the Workload Question-

We summarized workload data by department for each school. Average weekly hours and percent of time spent in each workload activity were calculated. We did not compile data by faculty rank. We found the rank of tenure track faculty had little impact on the type of work being performed. For example, duties performed by an assistant professor do not differ from duties performed by a professor. We illustrate fall term information in most cases because there was little difference in the type and amount of work reported in the other terms. The exception we noted was the summer term. Due to the limited number of summer classes offered and the limited number of faculty employed by the schools during that term, summer workload data was lower than other terms.

#### **Average Weekly Hours**

Most staff indicated they work more than 40 hours per week. During interviews, staff indicated they often work evenings, weekends, and holidays to accomplish goals in the noninstructional activities of their workload. This accounts for the high weekly totals that were reported. The following table illustrates the average hours worked per week by a faculty member in each department at each school during the 1989-90 Fall term:

# Table 6 Montana University System Average Weekly Hours Reported Per Faculty Member at Each Department Fall Term 1989-90

| School & Department    | Weekly Hours | School & Department       | Average<br>Weekly Hour |
|------------------------|--------------|---------------------------|------------------------|
| MSU                    |              | U of M                    | WCCK.                  |
| Administration         | 48.0         | Administration            | 48.8                   |
| Animal/Range Science   | 49.8         | Accounting                | 49.5                   |
| Architecture           | 61.3         | Orama Drama               | 49.5                   |
| Athletics              | 54.0         | urama<br>English          | 49.4<br>58.5           |
| Business               |              | -                         |                        |
|                        | 47.7         | Forestry                  | 51.6                   |
| Education              | 42.5         | History                   | 73.3                   |
| English                | 54.3         | Library                   | 40.0                   |
| History                | 55.0         | Mathematics               | 57.4                   |
| Library                | 59.0         | Psychology                | 50.3                   |
| Mathematics            | 47.9         | Research/Other            | 45.7                   |
| Mechanical Engineering | 52.2         | Teacher Ed.               | 53.7                   |
| dedia & Theatre        | 53.3         |                           |                        |
| Plant Pathology        | 53.5         |                           |                        |
| Plant & Soils          | 55.6         |                           |                        |
| Political Science      | 48.5         |                           |                        |
| Psychology             | 52.6         |                           |                        |
| 3,0,,0,0,0             | 52.0         |                           |                        |
| EMC                    |              | Tooh                      |                        |
| Administration         | 41.3         | Tech                      | co /                   |
| Administration<br>Art  |              | Administration            | 50.6                   |
| •                      | 53.1         | Athletics                 | 69.1                   |
| Athletics              | 81.5         | Biological Science        | 48.5                   |
| Biological Science     | 71.2         | Chemistry                 | 50.6                   |
| Business/Econ          | 47.3         | Engineering Science       | 49.5                   |
| ducation               | 40.9         | Environmental Science     | 64.5                   |
| ing lish               | 44.9         | Geological Engineering    | 43.8                   |
| Habilitative Services  | 51.0         | Information Systems & Bus | 41.2                   |
| listory                | 55.6         | Library                   | 44.5                   |
| ibrary                 | 40.0         | Math & Computer           | 52.5                   |
| lathematics            | 40.5         | Metallurgy                | 51.0                   |
| Psychology             | 58.4         |                           |                        |
| rsychology             | 30.4         | Mining Engineering        | 46.4                   |
|                        |              | OSHA                      | 46.7                   |
|                        |              | Petroleum Engineering     | 51.9                   |
|                        |              | Program Support           | 44.3                   |
|                        |              | Society & Technology      | 45.3                   |
|                        |              |                           |                        |
| <u>MC</u>              |              | NMC                       |                        |
| Administration         | 41.5         | Administration            | 40.0                   |
| Athletics              | 40.6         | Athletics                 | 46.0                   |
| Art                    | 56.0         | Ag & Mechanics            | 53.0                   |
| Biological Science     | 41.0         | Business                  | 49.0                   |
| Business               | 50.8         | Education                 | 49.0<br>34.0           |
| Education              | 45.8         |                           |                        |
| English                |              | Humanities                | 52.5                   |
| Y                      | 48.7         | Indust. Mechanics         | 50.5                   |
| listory<br>Umanities   | 44.8         | Science & Math            | 43.2                   |
| lumanities             | 31.0         |                           |                        |
| Industrial Arts        | 49.0         |                           |                        |
| ibrary                 | 41.5         |                           |                        |
| lathematics            | 41.2         |                           |                        |
| lusic                  | 34.4         | ·                         |                        |
| Physical Education     | 50.3         |                           |                        |
| Physics                | 53.0         |                           |                        |
| Tourism/Recreation     | 60.5         |                           |                        |
|                        |              |                           |                        |

These averages appear comparable with other studies we reviewed. The following lists the weekly hours that were reported in various reports:

- -- U.S. Department of Education reports-51.6 to 53 Hours
- -- Faculty Workload Review in Kansas-54 Hours
- -- Faculty Workloads, Higher Education Research-50 to 60 Hours

These reports listed average weekly hours ranging from 50 to 60 hours. The two larger universities fall within this range. The other smaller schools range from 45 to 49 per week. Variances are due to the different goals of each school. The larger schools emphasize research and public service which results in higher hours reported.

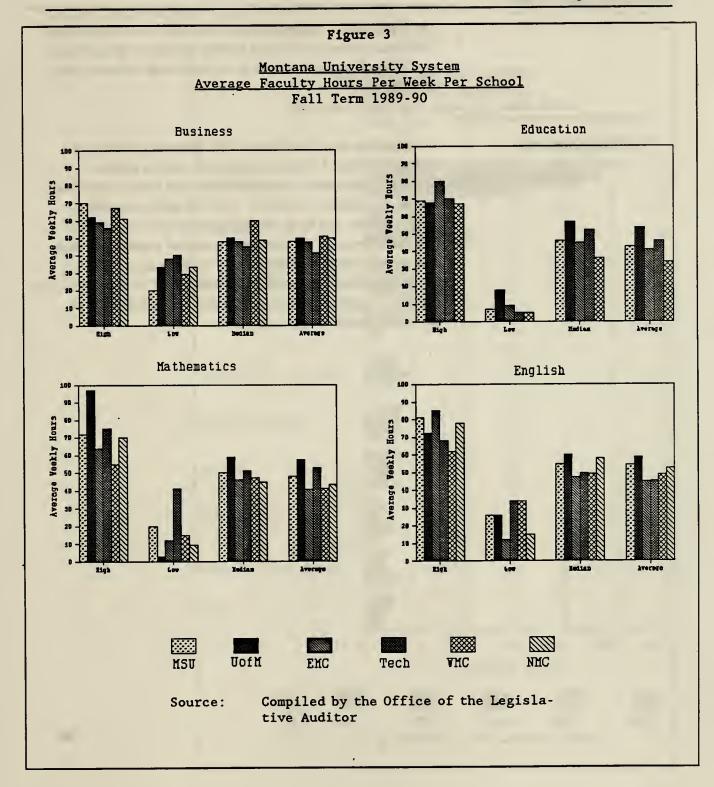
# Variances Between Departments

We reviewed the data to determine why some departments reported fewer hours. We found some departments, such as Education and Business, use more part-time faculty than other departments. Part-time instructors provide expertise in their respective fields but do not normally perform many of the other duties required of full-time faculty. Other departments report higher averages due to the amount of research and reading (scholarly activity) required. This applies to faculty in history departments who often reported higher average weekly hours. Due to fixed office hours and set job duties, staff in administration and library departments generally recorded 40 hours per week. Higher hours reported in these departments resulted from staff who also had academic responsibilities.

Variations can also occur between similar departments in different units. The following chart illustrates the weekly hours reported for four similar departments surveyed at all six schools. The illustration shows the average hours reported and the high and low weekly hours recorded. These ranges include time reported by part-time faculty. Also illustrated are the median hours reported which notes the midpoint of the hours reported by department personnel. Low hours that were noted were generally reported by part-time personnel. High hours were

#### Chapter IV University Workload

reported by staff who are on several committees, are involved in large research projects, or have administrative duties along with their academic responsibilities.



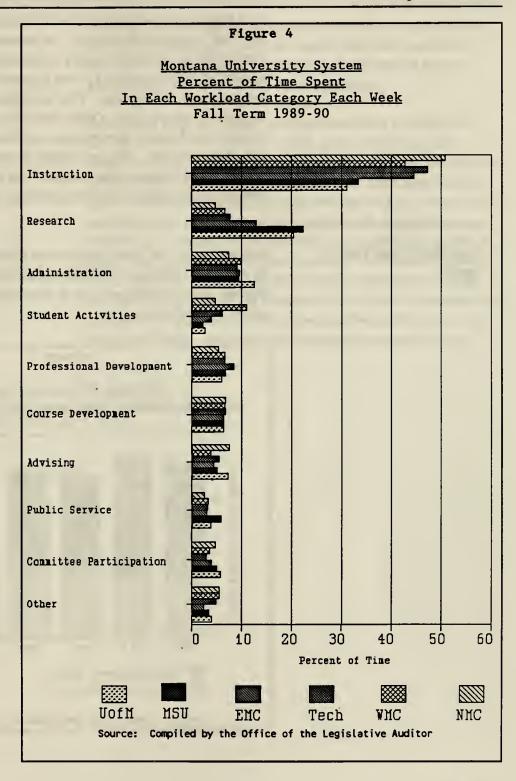
#### Chapter IV University Workload

The high and low ranges between reported hours demonstrate variations between individual faculty members. Some faculty are involved in organizations or activities that required additional hours.

#### **Workload Categories**

To determine where university staff spend their time, we reviewed criteria from the schools and various studies.

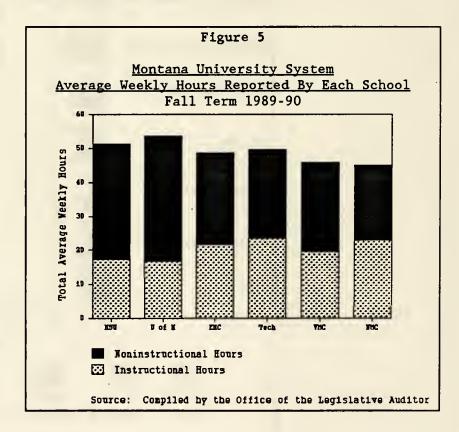
Activities discussed in national reports and other educational studies we reviewed included: 1) teaching, 2) research, 3) public service, and 4) duties that complement the school's mission statement. We found the workload reported by each school's staff included time in each of these areas. The following information outlines the percent of time spent in each workload category for each school during the Fall term of academic year 1989-90.



This data shows staff reported more hours in instruction than in the other workload categories. The second area of overall concentration for school faculty is research, although the amount of effort expended at the smaller colleges is less than at the two larger universities. This is reflective of the different emphasis at each school. Other areas where faculty recorded time included course development, professional development, and administration. The percentage of time in these categories was comparable among the schools. The following sections outline the individual workload activities in detail.

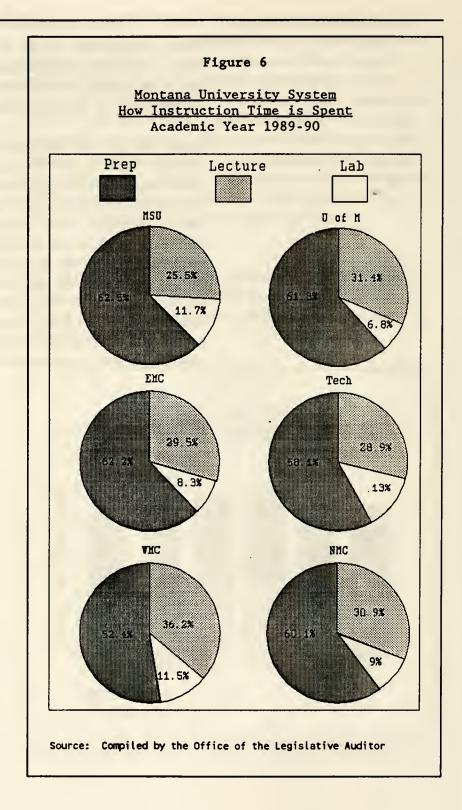
## How Instruction Time is Spent

Instruction time at each school varies from 31 to 51 percent of all reported workload. The following chart illustrates the average weekly hours reported as instruction time for each school in the fall term.



Although the percent of time in instruction varies considerably, the actual number of instruction hours was fairly consistent among the schools. Actual instruction hours ranged from approximately 16 hours to 23 hours per week.

Instruction time for faculty involves more than lecturing to students. Based on staff interviews, national reports, and questionnaires, we found there are several different instructional duties performed outside of the classroom. Staff time can be spent preparing for class, meeting with students outside of class, assisting students in labs, grading papers and preparing exams. Preparing for classroom lectures takes a considerable amount of time. Various state and national reports we reviewed indicated faculty spend at least two to three hours preparation time for each hour of lecture in the classroom. We found this standard to be true with the faculty in the Montana University System. As illustrated below, we found all six schools were comparable.



The schools which report higher lecture and lab time (Tech, WMC, NMC) emphasize instruction more as their primary mission. Schools which reported less time in lecture and lab (EMC, MSU, U of M) place more emphasis on research and public service.

#### Time in Classroom Ranges From Six to Ten Hours Per Week

Based on these percentages, we determined the amount of time spent by faculty in the classroom, either lecturing or conducting labs, ranges from approximately six to ten hours per week. This was calculated by multiplying the school's average weekly hours by the percent of time in each of the instructional areas.

Faculty at every school spend approximately 60 percent (10-14 hours) of their weekly instruction time preparing for classes.

#### Instructional Areas

There are several other ways to represent the instructional part of workload. For example, student credit hours, contact hours and student/faculty ratios are all methods of representing instructional workload. Student credit hours are the assigned credit hours per course multiplied by the number of students taking the course. Contact hours are the number of hours a faculty member spends teaching a class per week regardless of the assigned credits for the course. Student/faculty ratios measure the number of students per faculty member. Each of these methods represent some aspect of workload in terms of instructional activities. Student/faculty ratios are currently compiled by the Montana University System for funding purposes. The following list illustrates the ratios used in the 1989 and 1991 bienniums. These ratios are based on full-time faculty and full-time student enrollments using two and three year averages which are calculated by the schools and CHE.

|         | Table 7                          |               |
|---------|----------------------------------|---------------|
|         | Montana University System        |               |
|         | Student/Faculty Ratios           |               |
|         | 1989 and 1991 Bienniums          |               |
|         |                                  |               |
|         | 1989                             | 1991          |
| School  | Biennium                         | Biennium      |
| MSU     | 17.63                            | 17.84         |
| U of M  | 18.38                            | 18.70         |
| EMC     | 19.00                            | ~ 19.09       |
| Tech    | 17.32                            | 17.32         |
| MMC     | 15.51                            | 15.52         |
| NMC     | 15.45                            | 15.45         |
| Source: | Office of the Legislative Fiscal | Annium Pudnos |

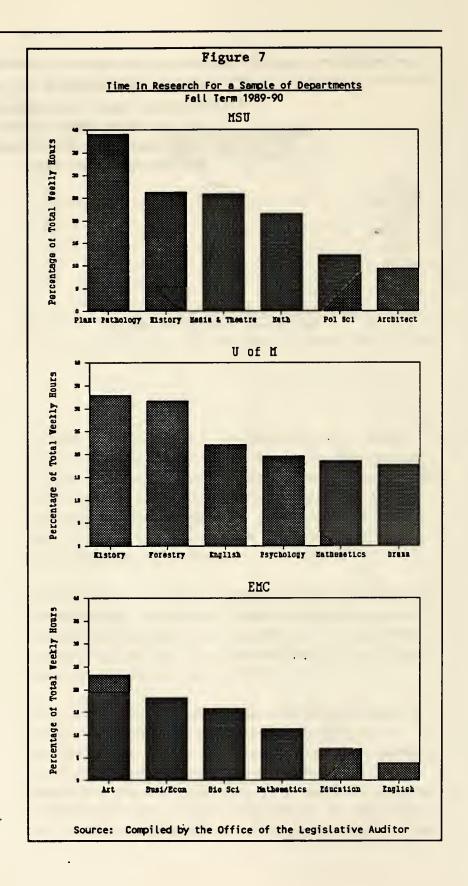
#### Different Research/Scholarly Activities

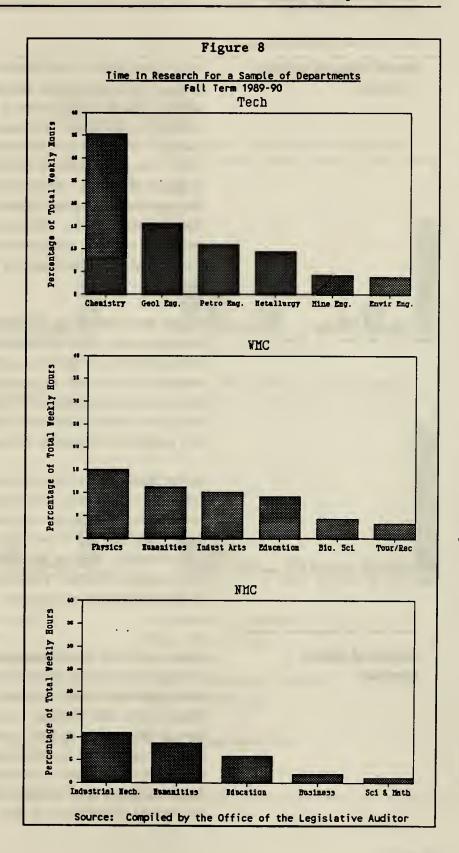
As noted in our definition of workload activities, we found research/scholarly activity time included many different types of duties including creative activities. These activities can entail securing a grant to conduct experiments in a specific area or creating a sculpture for exhibition. Faculty members conduct this type of activity for professional development and to meet criteria for promotion or tenure.

During our review we found examples of all the different types of research/scholarly activities. There were projects to study specific wildlife groups or plant diseases. In Arts and Drama programs we found time spent directing plays, writing articles and books, and performing in concerts.

We found all these types of activities were being conducted at the schools, but there was a wide variation in the amount recorded between schools. The schools with mission statements describing research as a major area of significance recorded more time in this area. MSU and U of M reported this activity as 20 percent or more of their overall efforts. At NMC, WMC, and Tech research amounted to less than ten percent of the time

reported. The amount of variance can also be seen at the department level. Certain departments within the schools reported higher research activity than others. The following charts illustrate the differences in research efforts for several departments at each school.





### **Duties Included in Other Activities**

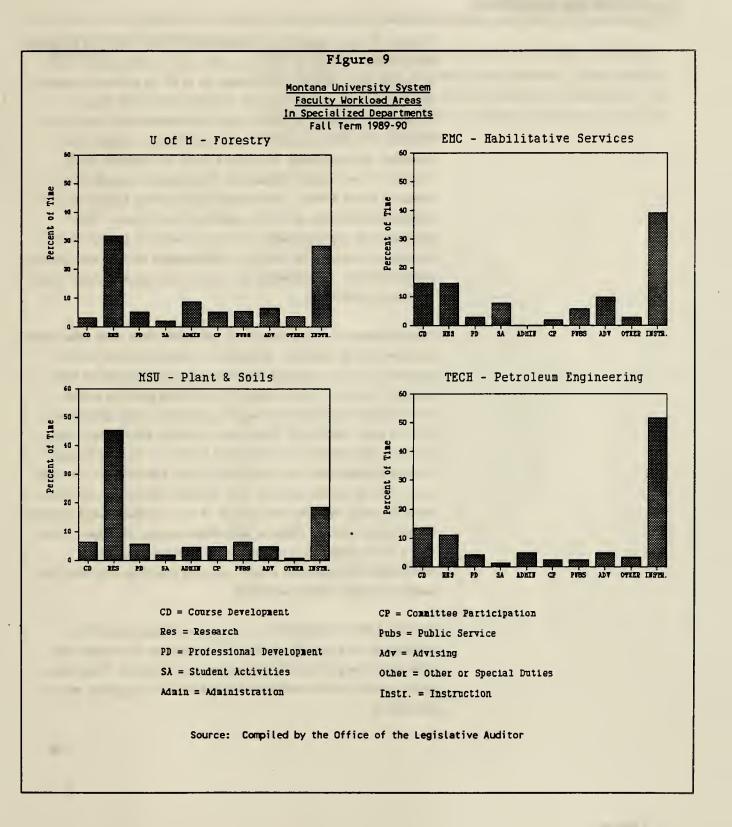
Activities that were comparable between the schools included professional development, course development, and student advising. Staff time reported in these areas was less than ten percent at each school. Professional development for faculty members often included time involved in professional organizations. These organizations varied, depending on the academic programs of faculty. Professional organizations for faculty in the engineering programs often included an occupational licensing organization. Faculty in many of the programs conducted seminars and attended national conferences. This type of activity is performed to keep current in their respective fields.

Course development involved time developing courses and curriculum for future offering to students. This was reported more often by new faculty members and faculty who had been assigned new courses. In some cases industry changes require adjustments in program curriculum. For example, changes within the computer industry often require the development of a new course or a change in current courses.

Student advising for faculty is usually conducted during scheduled office hours. Time spent advising was higher at specific times during the term, such as registration. Most faculty schedule one to two hours a day for students to drop by for assistance. At some schools the faculty are required to have a set number of hours. This accounts for the consistent percent of time reported at each school.

#### Individual Faculty Members

As noted earlier, the average hours reported per week vary between departments in each school. The percent of time faculty members spend in various activities also vary between departments. For example, a faculty member in the Biological Science Department at EMC would spend time differently than a faculty member in the Mathematics Department. These faculty variances occur between departments at all schools. The following charts show a sample of specialized departments and the percent of staff time in each workload activity.



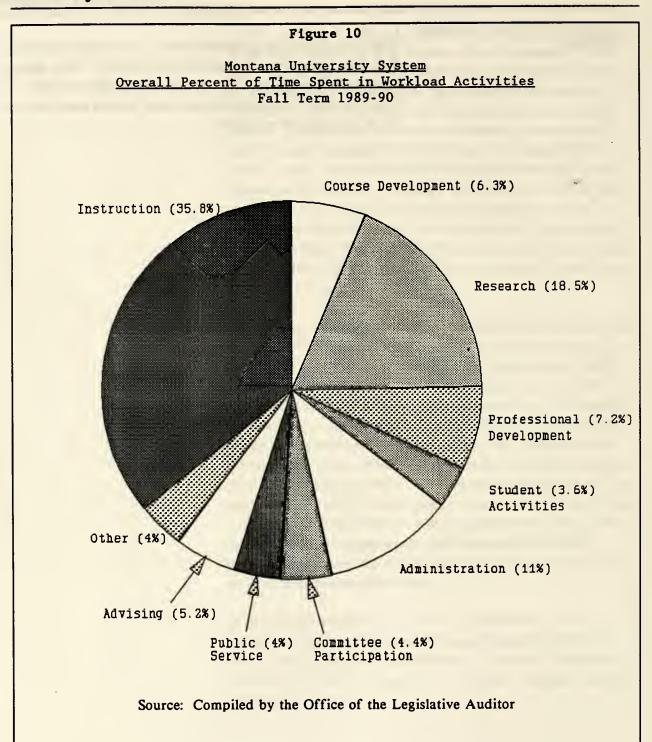
Faculty in these specialized departments often show an emphasis in different categories than in some other departments. For example, the Forestry Department at U of M reported research as 31.6 percent of their efforts but the percent of time in research for the whole school (all departments) was only 20.5 percent. Faculty members within the Forestry Department reported approximately 16 hours a week in research while faculty in the Teacher Education Department recorded five research hours a week. Petroleum Engineering faculty at Tech reported instruction as 51.57 percent of staff time. This amounted to approximately 27 hours a week of instructional related activities. The Athletics Department at the same school spent less time in instruction (17 hours) but reports more hours in student activities.

Departments at some universities recorded more time than other departments in research while others provided more public services. This was clearly illustrated by departments at MSU. In order to meet their mission of providing services to the agricultural community throughout the state some departments spent a large portion of their time in public service activities. Of the departments we surveyed at MSU the Animal/Range Science Department and the Plant & Soils Department reported more time in public service. The average public service hours reported each week by the faculty in the Animal/Range Science Department and the Plant & Soils Department was nine. This varies from other departments, such as Mathematics and Mechanical Engineering which reported less than one hour per week in public service activities.

Overall, some departments are very specialized and offer services in very specific areas. The activities of faculty will vary depending on which department is reviewed. This illustrates the different emphasis of the different programs within the school.

#### Summary

Overall we found the university system as a whole is spending their time primarily in instruction and research. Other areas of focus include public service and professional development. The following chart illustrates the time spent in each area when all six of the units are combined.



Overall average weekly hours reported by the schools varied between 45 and 53 hours. The average faculty member in the University System reported 35.8 percent of his/her time is spent on instruction. Research accounts for 18.5 percent. All other time reported by faculty was devoted to other duties outlined in this report.



### Chapter V Workload Management

#### Introduction

As part of our survey we interviewed university management personnel to determine what workload guidelines were in place. We tried to determine how workload was assigned and monitored. The following sections outline these areas.

#### Workload Guidelines

We found limited criteria for the management of workload. Most of the policies in place addressed instructional duties of faculty. Two schools, NMC and WMC, have established some formal faculty workload criteria in this area. This criteria is outlined in the faculty collective bargaining agreements. The agreements establish a limit on the number of credits that can be taught without additional compensation and a limit on the total number of credits that can be taught per semester/quarter. At NMC, faculty can teach up to 38 credits per year without additional compensation. The maximum number of credits that can be taught for the whole year is 46. WMC allows 27 credits per year with no more than 16 credits per semester. The differences in credit requirements occurred because NMC conducts its academic sessions on a quarterly basis while WMC operates on a semester basis.

The remaining four schools have informal guidelines for instructional load. Tech personnel indicated 12 credits per semester is their informal policy. At the two larger schools, interviews indicated nine credits per quarter is the "full load" for faculty. This results in a maximum workload of 36 credits per year for those who teach four quarters. (Although we noted most faculty do not teach during the summer session.) A national Higher Education Research report on Faculty Workload, compiled by the Association for the Study of Higher Education, noted the maximum workload is usually 9 to 12 credits per semester/quarter, depending on the level of the courses. (Lower limits are set if graduate level courses are taught.) This would be a level of 36 to 48 credits per year for a school on the quarter system and 27 to 36 credits for a school on the semester system. Based on these criteria, it appears the universities informal and

formal instructional guidelines are comparable to other schools. We did not compile credit load information on each faculty member; therefore, we did not compare each faculty member's adherence with these guidelines.

No policies were in place to address workload in noninstructional areas. For example, there were no guidelines on the amount of public service or professional development preferred. Activity in these areas is controlled by the individual faculty member and is reviewed during the faculty member's evaluation process.

#### **Assigning Workload**

To determine how workloads were assigned, we interviewed academic vice presidents, college deans, department heads, and program chairs. We also reviewed faculty handbooks and bargaining agreements for each school.

While doing this review, we found the method of management used at the university units differs from the conventional management style used in other state agencies. In other state agencies there are clear lines of authority and decisions are made by selected managers. We found most schools promote group decision making with input from faculty for related decisions. All involved parties are expected to have input and designate areas they would like to participate in. This is how assignment of instructional workload is approached. For the most part, faculty members can indicate the courses they would like to be responsible for. Then various department members hold group discussions on the interests of faculty and distribute the workload. Department heads or chairs ensure all required courses are assigned.

Workloads in noninstructional areas are primarily determined by individual faculty members. Individual freedom and motivation is expected and encouraged. University management has little input into activities in these areas. Faculty are also evaluated on these activities.

#### **Monitoring Workload**

Monitoring at other state agencies is accomplished by documented performance appraisals, supervisory approval of time sheets, and periodic reviews of duties being performed. This allows management to assess the need for additional staff and to monitor staff performance. At the university units this type of monitoring is difficult to perform. Staff duties and workloads can fluctuate from term to term. It is difficult to review or monitor duties when these duties can change frequently. Variations can occur if grant proposals are approved, student interest fluctuates, or there is an increase in committee involvement. University management does not control and assign all staff workloads because staff can control their workload levels in the noninstructional areas. Because of these circumstances, most faculty members do not have written, formal "job descriptions" which outline specific duties as do other state employees. There is no direct supervision of most faculty because there is no system in place for monitoring of staff performance beyond the annual evaluation process.

This type of system has been created to allow flexibility in the academic environment and to address changing interests of students. Due to individual faculty pursuits and constant academic changes, there is no supervisor approval of the number of hours reported in each time period. The faculty member is contracted with to perform a role within the university environment, not to work within strict time limitations. Committee meetings and student activities often occur in the evenings. These type of activities do not fit within any described time limitations. All these factors eliminate the effectiveness of "conventional" monitoring practices.

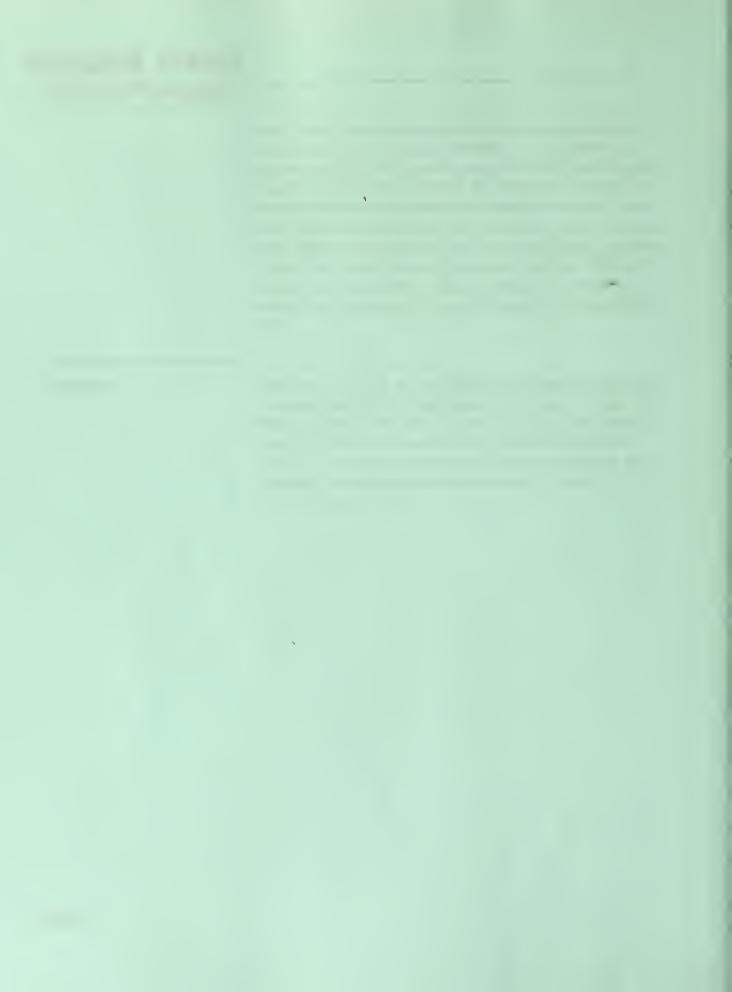
The monitoring we found during our review was varied. Most schools compile some type of management information on the instructional loads of faculty. The formal evaluation process allows management and peers to assess faculty accomplishments in the prescribed activities. The evaluations are also used to make adjustments to tenure status, faculty rank, and salary. We found every school has different evaluation criteria, but the

#### Chapter V Workload Management

basic guidelines at each required activities in public service, instruction, and professional development. An evaluation review usually occurs annually prior to tenure. Tenure usually takes place during the sixth year of employment. During the evaluation process, performance information is initially compiled by the faculty member and reviewed by peers. The evaluation process continues with a review by applicable department heads/chairs, deans, academic vice presidents, and ultimately the university president. It also provides the opportunity for management to communicate any concerns to the faculty member.

#### Summary

We found limited direct management involvement in the assignment and monitoring of workloads. Faculty pursue many different aspects of their jobs. Due to the competition between peers and pressure to receive tenure, faculty must perform duties in many areas to achieve success and recognition. Performance in these areas also allows schools to achieve their stated missions and goals.



# THE MONTANA UNIVERSITY SYSTEM 33 SOUTH LAST CHANCE GULCH

33 SOUTH LAST CHANCE GULCH
HELENA, MONTANA 59620-2602
(406) 444-6570

COMMISSIONER OF HIGHER EDUCATION

November 5, 1990

NOV 7 1990

Mr. Scott Seacat Legislative Auditor State Capitol Helena, MT 59620

Dear Mr. Seacat:

The purpose of this letter is to provide a brief written response to the survey your office conducted regarding college and university staffing and workloads within the Montana University System. It is my judgment that the survey was properly done and the results both accurate and useful. We in the University System greatly appreciate the professional manner in which your staff approached this assessment. They were open to our counsel on a variety of concerns which, in our judgment, lead to an improvement in the final report. From our perspective, there are some very useful findings that can assist us in bettering the overall management of the Montana University System.

Sincerely,

John M. Hutchinson

Commissioner of Higher Education



# Appendix A Sample Questionnaire Form & Instructions



#### Office of the Legislative Auditor Instructions for Faculty Activity Questionnaire

The enclosed questionnaire will be used to compile workload data on various activities of university personnel. There are two main areas we will concentrate on - the types of activities that comprise your workload and additional details on instruction duties. Please detach these instructions and use them as a guide in completing the questionnaire.

#### SECTION A OF THE QUESTIONNAIRE

Please verify the background data. Note any inaccuracies or corrections that are needed. Also designate your contract type.

#### SECTION B OF THE QUESTIONNAIRE

Record average hours worked per week in the listed activities. Different activities are included to provide an opportunity to describe a more complete picture of your workload. Please exclude all private consulting activities. You do not have to record activities in all categories, only in those which apply to your duties. Please do not record the same activity in two different categories. The following definitions outline the types of activities to include on the attached survey.

<u>Instruction</u> - scheduled teaching, class preparation, unscheduled teaching, graduate and thesis assistance, grading. (Do not include advising)

Course Development - development of courses/curriculum for future offerings.

<u>Research</u> - specific projects of research, scholarship, and creative activity. Includes time for securing, conducting & administering grants, reviewing colleague's research work, writing books & articles, creating new art forms, public performing, and exhibiting your work.

<u>Professional Development</u> - activities related to keeping current in professional field. Sabbatical leave, instructional evaluations, scholarly faculty activities, and professional organization duties included. (Do not include course development or instruction)

<u>Student Activities</u> - general contact with students that is not considered part of instruction or advising. Includes sponsoring student organizations, coaching intercollegiate or intramural athletics, and career placement activities.

<u>Assigned Administrative Duties</u> - only those duties which are specifically assigned as administrative duties. Performing duties of dean, chairperson, vice president, etc. This also includes recruiting students, interviewing academic candidates, administering department units, and keeping records. (Do not include administrative committee time)

<u>Committee Participation</u> - time spent on officially designated institutional committees. Graduate and thesis committee are reported in the Instruction category. Includes time for departmental staff meetings, faculty senate, search committees, etc.

<u>Public Service</u> - professional activities directed outside the institution and for the benefit of the general public. Community training grants, public lectures, and giving professional advise.

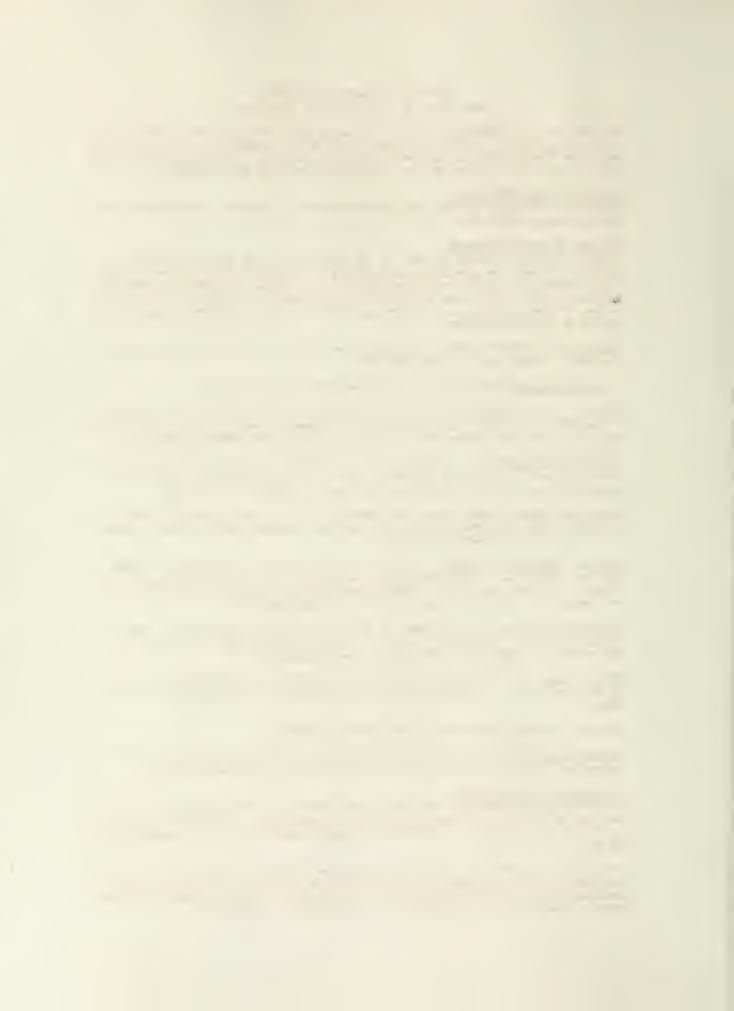
Advising - academic program advising and personal counseling.

<u>Special/Other Duties</u> - any university related activities that cannot be included in the other categories listed. Like filling out this questionnaire and meeting with auditors.

#### SECTION C OF THE QUESTIONNAIRE

Please provide a more detailed listing of your instruction time. Record average hours expended per week for each class you taught for the 1989-90 academic year. Include all courses that are taught or supervised. Note the number of Graduate Assistants supervised and number who lecture.

After the questionnaire is completed please return it to your department head or Vice President. Only the questionnaire itself needs to be returned. These instructions and the enclosed letter do not need to be returned. If you have any questions, please contact Angie Grove or Lisa Blanford at the Office of the Legislative Auditor at 444-3122.



If you have any questions please contact Angle Grove or Lisa Blanford at the Office of the Legislative Auditor in Kelena at 444-3122.  $A=3 \label{eq:A-3}$ 





